



# Matt Taraldsen

## Saint Cloud State University

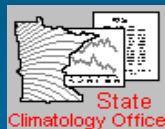
### Meteorology-Communications Student

Dr. Suzanne Stangl-Erkens  
Communication Studies, SCSU

Dr. Anthony Hansen  
Earth and Atmospheric Sciences, SCSU

Amanda Graning  
Meteorologist/Forecaster

Pete Boulay  
MN State Climatologist





# Background

***“Need a process by which WFO [Weather Forecast Offices] can systematically gather local customer input and local research results ... and turn that information into improved products and services” Ray Wolf – Science and Operations Officer (SOO) WFO Davenport, IA***

- 2007 March 1<sup>st</sup> Blizzard
- Survey Created & Maintained by Saint Cloud State University
- Utilizes Online Survey Methods
- Became operational March 1<sup>st</sup> 2008, will continue through winter 2010



# Goals

- **Improve communication of winter weather hazards/warnings.**
- Gain insight into decision making related to hazardous weather
- Not a critique of the forecast accuracy
- Available through variety of outlets
- Survey Results Available to all partners
- Goal for next season: **Expand Availability. More Partners!**



# Creating the Survey

- Utilized Range of Departments at SCSU
  - Statistics, Earth and Atmospheric Sciences, Communication Studies, Technology
- Created to follow Online Surveying Methods
- Questions were formulated similar to previous surveys on parallel topics
- Developed Post Storm Survey Homepage through SCSU where survey will be available
- Surveys Conducted Following Winter Storms that require a **Warning** to be issued by the local NWS



# Putting the Survey online



## Post Storm Survey Homepage

<http://studentweb.stcloudstate.edu/tama0502/poststormsurvey.html>





# Posting the Online Survey

- After a Storm Warning Expires
  - *Short* event specific survey available to take on the PSS site for 3 days
  - Multiple survey links in case of multiple/overlapping events
  - Continuous Updates to the PSS Web Site
- Multiple Locations
  - NWS “News of the Day” Section of Participating Offices
  - MN State Climatologist Web Page
  - Survey Link Distributed through MN Hidden Program
  - SCSU Meteorology Dept. Web Page
- **MORE PARTNERS!**



# Test Season

## *March-April 2008*

- Proposed for Winter Events Requiring a “Warning.”
- Didn’t quite work that way...
  - Not all Warning Events
  - Late Season, but winter did arrive
  - 3 good cases, over 500 responses
- **Wide Array of Events** (All Affected NE Minnesota & NW Wisconsin)
  - Blizzard of April 11<sup>th</sup>
  - Winter Storm of April 6<sup>th</sup>
  - Snow Event of March 18<sup>th</sup>







# Test Season Events

**Snowfall Amounts  
20080 March 18th**







# Test Season Survey Results

- Data went into an interactive web based interface
- Analyzed by Matt Taraldsen
- Presented Test Season Results:
  - Partners and Faculty at SCSU
  - Presented at Northern Plains Winter Storm Conference 2008
- Will be some minor adjustments to questions for 2008-2009 season





# The Questions





# Questions



## Post Storm Survey

### 1. Default Section

#### 1. Where do you get weather information on a regular basis? (Select all that apply).

- |  |   |
|--|---|
| <input type="checkbox"/> Telephone                         | <input type="checkbox"/> Friends                |
| <input type="checkbox"/> Cell Phone                        | <input type="checkbox"/> Newspaper              |
| <input type="checkbox"/> NOAA Weather Radio                | <input type="checkbox"/> Public/Commercial      |
| <input type="checkbox"/> National Weather Service webpages | <input type="checkbox"/> Radio Cable Television |
| <input type="checkbox"/> Other internet webpages           | <input type="checkbox"/> Local Television       |
| <input type="checkbox"/> Other                             |   |

#### 2. During this storm, where did you get your weather information? (Select all that apply).

- |  |  |
|--|--|
| <input type="checkbox"/> Telephone                         | <input type="checkbox"/> Friends   |
| <input type="checkbox"/> Cell Phone                        | <input type="checkbox"/> Newspaper   |
| <input type="checkbox"/> NOAA Weather Radio                | <input type="checkbox"/> Public/Commercial Radio   |
| <input type="checkbox"/> National Weather Service webpages | <input type="checkbox"/> Cable Television (e. g. The Weather Channel, CNN, Weather Plus) |
| <input type="checkbox"/> Other internet webpages           | <input type="checkbox"/> Local Television  |
| <input type="checkbox"/> Other                             |  |



# Conclusions



- Significant number of respondents stated they altered their routine because concerned about **road conditions/travel**.
- People did not react as much to meteorologic terminology such as sleet and freezing rain; *not a direct impact?*
- There was an increase in preparedness (gas, food water, communication) with highly anticipated blizzard versus low end snow event
- Climatology plays major factor....what is viewed as “normal Minnesota”?
  - A new question?



# The Future

- Expand Availability
- More PARTNERS!
  - Media
  - Other Weather Related Outlets
  - Universities





# How to get involved?

- Survey results will be updated as new cases are explored.
- If you are interested in becoming a partner, and hosting a link to the Post Storm Survey on your website,
- please send an email to

[poststormsurvey@gmail.com](mailto:poststormsurvey@gmail.com)



# Thank You!



**Matt Taraldsen**  
Saint Cloud State University  
Meteorology-Communications Student

[poststormsurvey@gmail.com](mailto:poststormsurvey@gmail.com)